

sixth paragraphs, page 2, sixth and seventh paragraphs, page 3, first, fourth and seventh paragraphs and page 4, first, third and fourth paragraphs. Reconsideration of the claims is expressly requested.

The Examiner rejected claims 15-31 under 35 U.S.C. §112, second paragraph, as being indefinite. In response, Applicants have amended the claims to improve their form. Specifically, claim 15 has been amended to recite a plastic --film adapted to be releasably disposed on an adhesive-- and to make clear that materials having release properties are --incorporated-- within the plastic film and extruded together with the film. Accordingly, claims 16-22 which depend on claim 15 have been amended to recite a plastic --film--.

Claim 16 has also been amended to delete the terms "basic polymers" and "properties that are modified" which were objected to by the Examiner as unclear. Claim 16 now recites that the materials having release properties are formed by modifying polymers forming the film to have release properties.

In addition, claim 18 has been amended to make clear that the materials having release properties are incorporated into the plastic film as additives. Claim 19 has been amended to remove the term "firmly" which the Examiner had objected to as being a relative term.

Claim 23 has been amended to recite a method of making a plastic --film--. Accordingly, dependent claims 24-29 have been amended to replace plastic "layer" with the term --film--. Claim 23 has also been amended to make clear that the method of making a plastic film comprises the steps of forming a mixture containing materials having release properties and polymers adapted to form a plastic film and polymerizing the polymers to incorporate the materials having release properties into the plastic film.

In addition, claim 25 has been amended to remove the term "master batch", which was said to be unclear, and to specify that the mixture contains a consistent proportion of the materials having release properties. Claim 28 has been amended to make clear that a substrate layer is coextruded with the plastic film.

Claim 31 has been amended to recite a plastic --film-- rather than a plastic "layer" as suggested by the Examiner. Claim 31 also makes clear that the film comprises a release layer coextruded with a substrate and disposed on the first side of the plastic film, the adhesive layer being disposed on the second side of the film.

It is respectfully requested that the Examiner enter these amendments and reconsider the rejection under 35 U.S.C. §112 in that no new issues have been created by these clarifying

amendments nor is any new searching required. Accordingly, entry of these amendments should be made to reduce the issues and to properly respond to the Examiner's objections under §112.

Claims 15-17, 19 and 21 were rejected under 35 U.S.C. §102(b) as being anticipated by *Berger et al. U.S. Patent No. 3,726,710*. Claims 15, 16 and 18-20 were rejected under 35 U.S.C. §102(b) as being anticipated by *Friedman EP 0 622 411 A2*. Claims 15-17, 19, 21 and 22 were rejected under 35 U.S.C. §102(e) as being anticipated by *Higgins U.S. Patent No. 5,932,352*. Claims 15, 16, 18, 19, 21 and 23-31 were rejected under 35 U.S.C. §102(e) as being anticipated by *Adamko et al. U.S. Patent No. 5,948,517*. In addition, claim 22 was rejected under 35 U.S.C. §103 as being unpatentable over either *Berger et al.*, *Friedman* or *Adamko et al.* Essentially, the Examiner's position was that these patents disclosed equivalent films despite being made by a different process.

This rejection is respectfully traversed.

Applicant believes it would be helpful to the Examiner to review certain key features of the present invention as well as its attendant advantages. The present invention provides, in one aspect, a plastic film adapted to be releasably disposed on an adhesive in which materials having release properties toward adhesives are incorporated within the plastic film and are

extruded together with the layer. Foils or sheets (plastic, paper or metal) coated with adhesives have to be provided with a cover sheet for the adhesive that has release properties vis a vis the adhesive. With labels, this cover is a separate cover sheet that can be peeled off whereas with adhesive tapes, the back side of the carrier foil is provided in most cases with a coating that has release properties. The application of this release coating in the course of manufacture is costly because a separate production step is required for that purpose.

The invention proposes that while the layer expected to exhibit the release properties versus the adhesive is being extruded, materials included within the plastic layer and exhibiting the release properties are jointly extruded with the plastic layer. As set forth in claim 15, a plastic film is provided wherein the materials having release properties are incorporated within the plastic film and are extruded together with the film. As set forth in claim 23, a method of making a plastic film is provided in which a mixture is formed containing materials having release properties and polymers adapted to form a plastic film. The polymers are then polymerized to incorporate the materials having release properties into the plastic film. As set forth in claim 31, a plastic film is formed having a first side and a second side. A release layer coextruded with a substrate is disposed on the first side of the plastic film. This release layer comprises materials having release properties

incorporated within the release layer. An adhesive layer is disposed on the second side of the plastic film. In this way, the film can be wound up with the release properties of the release layer preventing the adhesive from sticking firmly to this layer.

None of the cited art teaches the incorporation of materials having release properties within the plastic film so that they may be jointly extruded with the plastic film. Rather, the cited references deal with coatings of materials with release properties or with the application of such materials.

*Berger et al.* discloses a curable silicone release composition, a paper substrate coated with the curable release composition, a process for preparing a silicone paper release article in which a curable release composition is applied to a paper substrate and then cured, and a silicone paper release article prepared by the process. There is no disclosure or suggestion of a plastic film having materials with release properties incorporated within the plastic film so that these materials may be extruded together with the film. Rather, the materials with release properties in *Berger et al.* are simply coated on the outside of the film. It is respectfully submitted that, contrary to the Examiner's suggestion, the curable silicone release composition of *Berger et al.* is not the plastic film of

claims 15-17, 19 and 21-22 that can be extruded together with the release materials incorporated in the film.

*Friedman* discloses a composition comprising a blend of polymethylpentene and polypropylene, and a process for producing a film by extruding a film made from the blend. Although, in Applicant's film, polymethylpentene or polypropylene may be incorporated into the carrier web as it is being extruded for producing the releasing properties, *Friedman* requires either that the carrier web itself must be made from this blend or that the blend be applied to the carrier web. There is no disclosure or suggestion in *Friedman et al.* of modifying the typical carrier web material by incorporating, for example, silicone in the carrier web as it is being extruded.

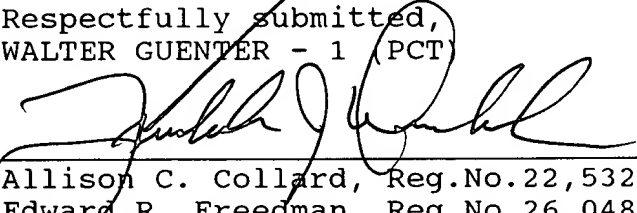
*Higgins* discloses a release film comprising a polymeric film substrate having a release layer on its surface. It is respectfully submitted that, contrary to the Examiner's suggestion, the release layer of *Higgins* is not the plastic film of claims 15-17, 19, 21 and 22 in which the materials having release properties, such as silicone, are incorporated within the film so that they are extruded with the plastic film. Otherwise, there would be no reason in *Higgins* to apply the release composition to the substrate film surface by conventional coating techniques.

Adamko et al. discloses a silicone-free release film comprising a blend of two or more linear low-density polyethylenes. The patent states that silicone materials are undesirable as release film materials and therefore uses a selected class of linear low-density polymers as release materials. It is respectfully submitted that, contrary to the Examiner's suggestion, the plastic film of claims 15, 16, 18, 19 and 21-22 is not the release film of Adamko et al. in which materials having release properties are incorporated within and extruded jointly with the plastic film. It is also respectfully submitted that the method of claims 23-30 or the construction set forth in claim 31 is also not shown in Adamko et al.

In summary, claims 1-29 and 31 have been amended. In view of the foregoing, withdrawal of the final action and allowance of this application are respectfully requested.

Respectfully submitted,  
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Enclosures: Copy of Petition for 3 Month Extension of Time  
(Large Entity)

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as first class mail in an envelope addressed to: Assistant Commissioner of Patents, Washington, D.C. 20231, on August 31, 2001.

  
Lisa L. Vulpis

## EXHIBIT A

### Marked-up Version of Amended Claims 15-29 and 31 Showing the Changes Made

15. (Amended) A plastic [layer] film adapted to be releasably disposed on an adhesive, comprising materials having release properties towards adhesives, wherein the materials having release properties are [arranged] incorporated within the plastic [layer] film and are extruded together with said [layer] film.

16. (Amended) The plastic [layer] film according to claim 15, wherein the materials having release properties are formed by modifying polymers forming the film to have release properties [plastic layer comprises basic polymers having properties that are modified to form the release properties].

17. (Amended) The plastic [layer] film according to claim 15, wherein the materials having the release properties are incorporated into the plastic [layer] film as additives and comprise silicone compounds.

18. (Amended) The plastic [layer] film according to claim 15, wherein the materials having the release properties are incorporated into the plastic film as additives and comprise polyolefin compounds.

19. (Amended) The plastic [layer] film according to claim 15, wherein the materials having the release properties are [firmly] embedded into a matrix of the plastic [layer] film.

20. (Amended) The plastic [layer] film according to claim 15, wherein the materials having the release properties comprise inorganic fillers.



21. (Amended) The plastic [layer] film according to claim 15, wherein the plastic [layer] film further comprises a carrier layer.

22. (Amended) The plastic [layer] film according to claim 15, wherein the thickness of the plastic [layer] film is about 5  $\mu\text{m}$ .

23. (Amended) A method of making a plastic film [layer having an adhesive layer and a release layer], comprising the steps of:

forming a mixture containing [adding] materials [containing] having release properties [to the plastic layer] and polymers adapted to form a plastic film; and

polymerizing the polymers to incorporate the materials [containing] having release properties into the plastic [layer] film.

24. (Amended) The method according to claim 23, further comprising the step of extruding the plastic [layer] film onto a substrate layer.

25. (Amended) The method according to claim 23, wherein the mixture contains a consistent proportion of the materials having release properties [further comprising the step of producing the plastic film from a master batch].

26. (Amended) The method according to claim 23, further comprising the step of co-extruding a substrate layer with the plastic [layer] film.

27. (Amended) The method according to claim 23, further comprising the step of extruding the plastic [layer] film with a plastic carrier layer.

28. (Amended) The method according to claim 27, further comprising the step of extruding the plastic [layer] film onto a carrier web.

29. (Amended) The method according to claim 23, further comprising the step of embossing the plastic [layer] film.

31. (Amended) A plastic [layer] film having a first side and a second side, comprising:

a release layer coextruded with a substrate and disposed on [embedded in] the first side of the plastic [layer] film, said release layer comprising materials having release properties incorporated within the release layer before extrusion of the release layer, wherein said release layer is selected from the group consisting of a modified polymer, a silicone compound and a polyolefin additive; and

an adhesive layer disposed on the second side of the plastic [layer] film.